

97-84148-9

Gormley, Michael J.

Address of M.J. Gormley,  
chairman, Car service...

[S.I.]

[1927]

97-8448-9  
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES  
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

308  
Z  
Box 269 Gormley, Michael J 1876 - 1945.  
... Address of M. J. Gormley, chairman, Car  
service division, at the 8th annual meeting of the  
Mechanical division, American railway association,  
at Montreal, Canada, June 8, 1927. [1927]  
cover-title, 13 p. diags. 27 cm.  
  
Multigraphed.

0

001 10

RESTRICTIONS ON USE: Reproductions may not be made without permission from Columbia University Libraries.

TECHNICAL MICROFORM DATA

FILM SIZE: 35mm

REDUCTION RATIO: 14:1

IMAGE PLACEMENT: IA ☒ IIA IB IIB

DATE FILMED: 7-29-97

INITIALS: PB

TRACKING # :

24010

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

**AMERICAN RAILWAY ASSOCIATION  
CAR SERVICE DIVISION**

308

Z

Box 269

**ADDRESS OF M. J. GORMLEY,  
CHAIRMAN, CAR SERVICE DIVISION,  
AT THE 8<sup>TH</sup> ANNUAL MEETING OF  
THE MECHANICAL DIVISION,  
AMERICAN RAILWAY ASSOCIATION,  
AT MONTREAL, CANADA,  
JUNE 8, 1927.**

**MONTREAL, CANADA  
JUNE 8, 1927.**

April 23 1930 DA/HK

Address of

M. J. GORMLEY

Chairman, Car Service Division,

AT THE 8TH ANNUAL MEETING OF  
THE MECHANICAL DIVISION, AMERICAN RAILWAY ASSOCIATION

AT MONTREAL, CANADA

JUNE 8, 1927.

The Car Service Division, and myself personally, feel highly honored at being asked, for the first time in our history, to address a meeting of the Mechanical Division of the American Railway Association. We fully realize that it is not within the province or the knowledge of the Car Service Division to address you gentlemen, representing the Mechanical Division, upon the things mechanical with which you are concerned; therefore we will confine ourselves to the problems confronting the Car Service Division and the character of the work for which it was organized.

The Car Service Division, in reality, is employed to police the carrying out of the Car Service Rules, which are designed to return cars to the owning lines, either loaded or empty, in such volume as to meet the traffic requirements of the individual owning lines and insure the proper maintenance of the equipment. Equipment handling is a very large question, many branches of which would be a subject of sufficient length for an address of this kind. It is our purpose, therefore, to deal as briefly as possible with the various phases of the subject, in order to give you a picture of the problems confronting the railroads and the Car Service Division in the practical working out of their plans, some of which are as follows:

# 1. CAR DISTRIBUTION

In this we have three major problems:

- (a) The return of refrigerator equipment from the large consuming territories of the districts east of the Mississippi and north of the Ohio rivers to the producing territories of the west and south.
- (b) The return to the western agricultural territory of the equipment that has been used in the transportation of agricultural products from the west to the large consuming territories of the east and south.
- (c) The return of coal car equipment to large coal producing lines, which coal is largely marketed on lines beyond the car owner's rails.

There are, of course, a great many minor problems in connection with car distribution, but the above are of principal concern to the railroads and the Car Service Division.

The following chart shows that the population of the territory west of the Mississippi River is 17 people to the square mile, and east of the Mississippi and north of the Ohio is 156 to the square mile. 72% of the total grains and 72.5% of the total animals and products are produced in the western district. On the other hand, chart indicates that 72.6% of the manufacturing establishments, as measured by their capitalization, are located east of the Mississippi and north of the Ohio rivers. This densely populated eastern territory is a very large consumer of the agricultural products of the west and south. The heavier traffic, therefore, is constantly eastbound and northbound into this large manufacturing territory of the east and the lack of westbound and southbound traffic in equal amount makes necessary the continued return to these territories of empty equipment. Unless this equipment is moved regularly from day to day, either loaded or empty, congestion would very quickly result in the eastern territory, and with a shortage of equipment in the west and in the south.

## 1926 DENSITY OF POPULATION PER SQUARE MILE



	AREA	POPULATION	DENSITY PER SQ. MILE
EASTERN	359,093	55,919,908	156
SOUTHERN	449,626	22,493,068	50
WESTERN	2,218,070	37,843,979	17
TOTAL U.S.	3,026,789	116,256,955	38

## 1926 CARLOADS OF GRAIN ORIGINATED



EASTERN	240,936
SOUTHERN	117,256
WESTERN	919,273
TOTAL U.S.	1,277,465

## 1926 CARLOADS OF TOTAL ANIMALS AND PRODUCTS ORIGINATED



EASTERN	435,100
SOUTHERN	165,586
WESTERN	1,586,692
TOTAL U.S.	2,187,378

## 1919 CAPITALIZATION OF MANUFACTURING ESTABLISHMENTS



EASTERN	\$ 32,443,556,000
SOUTHERN	3,619,736,000
WESTERN	8,624,802,000
TOTAL U.S.	\$ 44,688,094,000

## 2. ADEQUACY OF TRANSPORTATION.

The adoption by the railroads in 1923 of the "Program to Provide Adequate Transportation Service" is now well known to all. It has been carried out in its entirety and no doubt the results obtained are far beyond the fondest dreams of the railroads at the time of its adoption.

The railroads recognize that adequacy of transportation at all times, regardless of conditions, is their duty. The following figures clearly indicate the results of that program:

- (a) Freight Cars placed in service since January 1st, 1923  
608,777 Cars
- (b) Freight Cars retired from service since January 1st, 1923  
552,358 Cars
- (c) Freight Car ownership Class I roads and Average Carrying Capacity  
May 1st, 1927 - 2,332,184 Cars - 45.38 Tons  
May 1st, 1923 - 2,314,658 " - 43.10 "
- (d) Railroad Controlled Private Refrigerator Car Ownership  
May 1st, 1927 - 90,740 Cars  
May 1st, 1923 - 54,127 "
- (e) Freight Cars Awaiting Repairs  
May 1st, 1927 - 135,458 Cars - 5.9 Percent  
May 1st, 1923 - 210,505 " - 9.2 "
- (f) Surplus Freight Cars
- |      | Maximum      | Minimum Surplus At Time<br>of Peak Loading |
|------|--------------|--------------------------------------------|
| 1926 | 310,155 Cars | 88,130 Cars                                |
| 1923 | 312,338 "    | 34,138 "                                   |
- (g) Locomotives placed in Service since January 1st, 1923  
11,049 Locomotives
- (h) Locomotives retired from service since January 1st, 1923  
13,247 Locomotives
- (i) Locomotive ownership Class I Roads and Average Tractive Power  
May 1st, 1927 - 62,239 Locos. - 42,013 Lbs. Tractive Power  
May 1st, 1923 - 64,585 " - 38,024 " " "

## (j) Locomotives awaiting repairs

May 1st, 1927 - 8,915 Locos. - 14.5 Percent  
May 1st, 1923 - 14,131 " - 22.0 "

## (k) Locomotives stored serviceable

May 1st, 1927 - 6,212 Locomotives  
May 1st, 1923 - 1,326 "

## (l) Revenue freight car loading

1926 - 53,308,753 Cars  
1923 - 49,812,113 "

Increase 3,496,640 Cars, - 7.0 Percent.

During 1926 there were loaded 53,308,753 cars, the largest year's business ever handled by the railroads of this country. The average daily surplus of equipment during 1926 was 205,054 cars, and the lowest surplus, at the time of the heaviest loading, was 88,130 cars.

## 3. EFFICIENCY IN CAR HANDLING.

### (a) Miles per Car per Day

1926 - 30.4 Miles  
1925 - 28.5 "  
1924 - 26.8 "  
1923 - 27.8 "

### (b) Tons per Loaded Car Originated

1926 - 35.1 Tons  
1925 - 34.4 "  
1924 - 34.0 "  
1923 - 34.5 "

### (c) Demurrage

	Assessed	Avg. assessed per loaded car (omitting Miss. I. C. L.)
1926 -	\$ 22,125,642	56 Cents
1923 -	\$ 28,391,726	75 "

The tonnage figures show, as to the items of coal, sand, stone and gravel alone, that the tons per car obtained in 1926 over 1923 was 1.7 tons. Had there been no increase in the tons loaded per car in 1926, compared with 1923, it would have required the handling of 396,000 additional cars to have moved the 1926 tonnage of these commodities. Furthermore, had there been no increase in tons per car in

1926 compared with 1920, it would have required the handling of 801,000 additional cars to have moved the 1926 tonnage.

The wheat loading in 1926 averaged 1.3 tons per car more than in 1920. Had there been no increase in tons per car 1926 compared with 1920 it would have required the handling of 19,477 more cars to have moved the 1926 tonnage.

We believe the mechanical officers of the railroads can point with pride to their foresight and ability which brought about the more modern and efficient car which makes results such as these possible. We doubt if they ever generally get credit to which they are entitled for the progress which has been made in providing more adequate transportation, particularly in recent years

#### 4. POSSIBLE RESULTS OF CAR EFFICIENCY ON CAR OWNERSHIP.

The addition of 608,777 modern, high capacity cars, either new or rebuilt; the retirement from service of 552,358 low capacity, inefficient cars; the placing in service of 11,049 locomotives since January 1st, 1923; the cooperation of the shippers through the medium of the Regional Advisory Boards and the important part they have played in reducing the time required for loading and unloading of equipment, as indicated by the decreased demurrage assessments; and, to some extent, an increase in the loading per car, were the main factors that made it possible for the carriers to handle the greatest traffic in their history, and, at its peak, have available a large surplus of equipment. A recent report of the Car Service Division, and which has been approved by the Board of Directors of the American Railway Association, reads, in part, as follows:

"After very careful consideration of this question of the economical use of cars, the Car Service Division believes that it is possible to handle the traffic of the country for some time to come with a total decrease in the ownership of open top and box cars of at least 100,000 provided:

- (1) That there be a continuation of the replacement of the smaller capacity and less efficient cars with cars of modern type.
- (2) That there be a continuation of the present plan of maintaining equipment at the highest practicable point, as determined by the necessities on the individual railroads.

(3) That there be a further increase in the miles per car per day of at least one mile.

(4) That further intensive consideration of the load per car be given by railway management and all the Advisory Boards with a view of increasing tons per car to the greatest possible extent and not less than average of one ton per car:

- (a) By the receivers wherever practicable buying in carload rather than specified quantities;
- (b) By careful check on the part of shippers to load cars to their maximum carrying capacity where they are not limited by the receivers' requirements.

Example: During the first week of December 1926 fourteen cars 80,000 pound capacity or higher of one commodity were loaded by one shipper at Kansas City destined to one consignee at Philadelphia for unloading at one warehouse. Average load per car 57,877 pounds; heaviest load for one car 88,830 pounds; total average capacity utilized of the 14 cars was 64 per cent. Receiver informed representative Car Service Division that so far as they were concerned cars could have been loaded to full capacity. If all cars had been loaded with same tonnage as heaviest load 5 cars less would have been required to handle this tonnage.

(5) By careful supervision on the part of industries as to loading and unloading of equipment with a view of making a reduction of at least 20 percent in the amount of demurrage assessed during the year 1926.

"The Car Service Division recognizes that these conclusions as to car ownership would not apply to every individual railroad, there being without question some lines requiring a larger proportion of new equipment to meet their increasing traffic necessities than would be applicable to the lines as a whole."

This suggestion of the Car Service Division, if carried out, will be a complete fulfillment of the aims of the railroads, with the assistance and cooperation of the shippers, to handle an increased traffic with a decreased expense for overhead in car ownership.

We call the particular attention of the mechanical officers to the part which they should play in this proposed program of reducing the total ownership of equipment by

- (a) Replacement of the less efficient with more modern type equipment, and

- (b) Maintenance of the equipment to the highest possible standard.

You will note that here, again, you are called upon to shoulder a major part of the problem. We are not unmindful of the fact that the replacing of obsolete equipment is not entirely within the control of the mechanical officers, but they certainly are in position to point out to their executive officers where they can make a good return upon the investment by retiring some of the older type and less efficient equipment. In other words, you must necessarily put yourselves in the same position with your own executive officers as the salesman who is selling you a machine tool, on the basis of proving to you that its purchase will bring about such a reduction in your operating and maintenance expenses as to justify the expenditure.

#### 5. EMPTY CAR MILEAGE.

This very vital and important question is receiving constant consideration and study by the individual railroads with a view of its reduction to the lowest possible minimum. We do not want to take up your time to the extent necessary to deal with this subject in its entirety, but, briefly stated, one thing necessary on the part of any railroad in dealing with empty car mileage is to maintain such checks and records from day to day as will insure that there be no unnecessary movement of empty equipment in the direction of the preponderant loaded movement. We know that in the opposite direction there must be an empty movement, which is unavoidable. It is well known that the principal causes of empty car mileage and its variation from year to year are largely due to things over which the railroads have no control.

An analysis of empty car mileage, one period compared with another, is valueless unless all factors affecting that mileage are taken into consideration. A very great increase in the refrigerator traffic, automobile traffic, and oil traffic in the past few years involves a great deal of additional empty car mileage. Also the Panama Canal has caused an empty westbound movement of some of the equipment that was formerly used in the movement of tonnage now moving through the Canal. If you will examine the records of your individual railroads you will see that the best records in the percentage of empty mileage have been made during periods of congestion, and coinci-

dent with that has been car shortages. Empty cars standing still do not make mileage, but they do cause car shortages.

Generally speaking, when you have an increase in the miles per car per day, one period compared with another, it indicates a more prompt movement of all the empties, better service to the public, and also an increase in the percentage of empty mileage. We still see comparisons made on some items of transportation, 1926 with 1920. 1920 was a year of heavy traffic, congestion and car shortage, with general dissatisfaction on the part of shippers, and in fact it has been estimated by Governmental authorities that the car shortages and congestions in 1920 and 1922 would aggregate a billion dollars in cost per year to the public of this country. 1926, on the other hand, was a year of the heaviest traffic ever handled, without car shortage, congestion, or transportation difficulty of any kind, and also with statements from Governmental and other authorities that such transportation service has meant a saving of untold millions in the reduction of inventories, tying up of capital in goods in transit, and various other related factors. Sometime since, we saw an article which attempted to criticize the record of May 1926 as compared with May 1920 from the standpoint of empty mileage and the dead weight per train, and which gave no consideration to the congestion existing in May 1920 and the very fine service in May 1926. We took the records of one railroad for the same months to prove the fallacy of attempting to analyze transportation efficiency as related to empty car mileage without taking all the factors into consideration. These figures and chart show that this railroad had

#### (a) Average cars on line daily

1926	-	40,316 cars
1920	-	35,179 "

Increase 5,137 " - 14.6 per cent.



(b) Cars loaded

1926 - 121,159 Cars  
1920 - 57,648 "

Increase 63,511 " - 110.2 per cent

(c) Cars awaiting repairs

1926 - 1,260 Cars  
1920 - 3,891 "

Decrease 2,631 " 67.6 per cent

(d) Average daily Surplus or Shortage

1926 - 2,447 Car Surplus  
1920 - 2,211 " Shortage

(e) Tons per Car

1926 - 44.3 Tons  
1920 - 40.1 "

Increase 4.2 " - 10.5 Per cent per Car

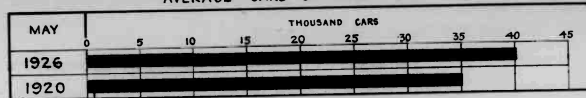
(f) Average Miles per Car per Day

1926 - 54.7 Miles  
1920 - 38.2 "

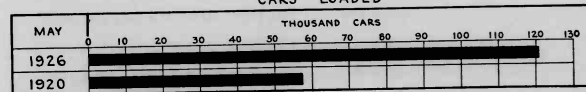
The percentage of empty mileage increased from 36.6 in 1920 to 43.5 in 1926, and entirely due to the better movement of all equipment, so that in this particular case an increase in the percentage of empty mileage is distinctly a measure of efficiency, and not deficiency. The outstanding factor, and the real measure in connection with performance on this particular railroad is that their ratio of transportation expense to revenue was 41.55 in 1920 and 28.69 in 1926.

We merely cite you these figures in order that you may take with a "grain of salt" any statements you may hear with respect to the percentage of empty mileage unless all of the factors relating thereto are presented.

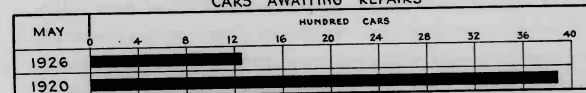
AVERAGE CARS ON LINE DAILY



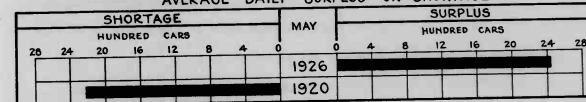
CARS LOADED



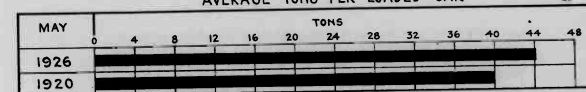
CARS AWAITING REPAIRS



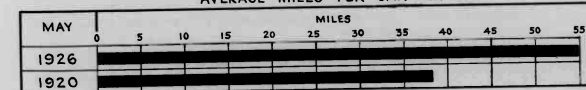
AVERAGE DAILY SURPLUS OR SHORTAGE



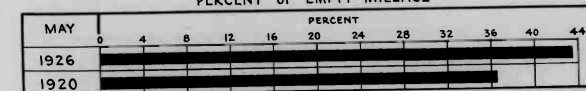
AVERAGE TONS PER LOADED CAR



AVERAGE MILES PER CAR PER DAY



PERCENT OF EMPTY MILEAGE



## 6. CAPITAL EXPENDITURES AND OPERATING EXPENSES

The addition of large numbers of modern cars and locomotives, heretofore referred to, in addition to improvements in terminals, reduction in grades, and so forth, has meant the expenditure of large sums of money to provide the adequate transportation service now being rendered. During the past six years the railroads have made an expenditure of \$2,450,751,649 for equipment and \$2,102,726,104 for other improvements, a total of \$4,553,477,752. The other side of the story is that the operating expenses for 1926, when the heaviest traffic on record was handled, were one billion, one hundred and twelve million, six hundred thousand dollars less than 1920. True, this reduction was not all due to the improvements made in the physical plant but certainly the largest part of it was due to that fact. These results, to my mind, not only prove the wisdom of what the railroads have done to provide more adequate transportation but also point the way to what they must continue to do in the future to provide for the constantly growing traffic demands of the country.

This brings us to the inevitable question and challenge as to the ability of the railroads to handle the traffic that will be offered in the future. We have noted the following challenge from a high authority:

"We must provide more transportation facilities for the future of our country as a whole. Already our great railway gateways and terminals are showing signs of congestion. Their traffic in twenty-five years has grown from one hundred fourteen billion ton miles to three hundred thirty-eight billion ton miles, or it has nearly tripled. At a much less rate of increase we must within another quarter of a century provide for expansion in facilities to handle at least double what we are moving today. Our present railways will obviously be inadequate to meet that task."

What are the factors that measure the transportation capacity of a railroad? To my mind, they are the following:

- (1) Financial ability
- (2) Man power
- (3) Physical equipment
- (4) Cooperation of the shippers and receivers in the efficient use and movement of equipment.

Without the money to pay, a railroad, of course, is handicapped.

It cannot buy equipment; it cannot maintain its road and equipment; it cannot secure the latest improvements; it cannot, in a word, adequately finance its operation. It goes without saying, therefore, that unless a railroad can earn a reasonable and safe margin above expenses, it is very definitely limited in its ability to furnish transportation service. We believe this is now fully understood by not only the Governmental regulatory authorities, but also by the public.

There seems to be no question but that employees can be secured in ample numbers, and with training and ability to carry on railroad operations. There appears to be no limiting factor in this respect.

As to physical equipment, there will be no question, with financial ability to purchase, and with man power to operate.

As to item 4, efficiency in the use of equipment. The ability of a railroad to furnish transportation service may be modified by the shippers' capacity to load and to unload. To be an active element in the transportation machine for manufacturing transportation service, a car must move. If I asked you now to close your eyes and think of a freight car, I have no doubt that a vision would come to you of a car standing still and not in motion, but only a moving freight car actually manufactures transportation service. A car standing awaiting a load, or a loaded car standing waiting to be unloaded are both an obstacle to the free movement. The greatly increased car efficiency in the past few years is due in a considerable measure to the very active cooperation of the shippers with the railroads through the Regional Advisory Boards. WITH THE CONTINUATION OF THAT COOPERATION AND A BETTER KNOWLEDGE ON THE PART OF SHIPPERS AND RECEIVERS OF FREIGHT OF THEIR RESPONSIBILITY IN BRINGING ABOUT A MORE ECONOMICAL OPERATION, THROUGH BETTER UTILIZATION OF THE PLANT AVAILABLE, AND WITH THE FINANCIAL ABILITY OF THE RAILROADS ASSURED, THERE NEED NEVER BE ANY QUESTION IN THE MIND OF ANYONE AS TO THE ABILITY OF THE RAILROADS TO MEET THE TRANSPORTATION DEMANDS OF THE FUTURE, REGARDLESS OF WHAT THEY MAY BE.

24010

**END OF  
TITLE**